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BEACHCOMBERS.

THE progress of civilisation in the countless islands of the Pacific has been comparatively slow—a fact due in great measure to the extraordinary ignorance which prevails among even well-informed people as to the dimensions of these islands, the extent of the groups, and the gigantic field they offer for commercial enterprise of all kinds. Some day or other, perhaps in our own time—for the area of commerce is getting wider every year—the wealth of the archipelagoes which stud the Pacific will be appreciated by those holding the money-bags of Britain. At present, a preference is decidedly shown for localities which, if better known, do not in proportion to their size compare in riches for an instant with the coral-gemmed groups to which I allude.

If the average British colonist and capitalist has not since his boyhood's days, when he may have dipped into Cook's *Voyages*, given a thought to the islands of the great South Sea, other white men have; and these pioneers of the Pacific are chiefly of their own stock—English or American. From some personal experience, I know a good deal about these people; and as in great measure their doom as a class will be sealed the moment systematic trading is introduced, it may be as well, now that a gleam of hope brightens the future of Polynesia owing to the cession of Fiji, to let the world know at least a little of perhaps as strange a class as the trading propensities of the Anglo-Saxon have ever produced.

From the Tuamotus in the east to the Carolines in the west, extend those vast clusters of islands which we call Polynesia—the mountain-peaks of a submerged continent, or the atolls of coralline structure. To most people the very names of the groups are unknown, and the general idea in England is, that they are inhabited principally by a bloodthirsty race of inveterate cannibals, ready, nay anxious to kill and devour the adventurous traveller directly he reaches their inhospitable shores. Yet on these islands, and surrounded by their dusky inhabitants, are the

homes of the white 'beachcomber,' who as a rule would not barter the romance of his lotus-life existence for a ducal palace in Mayfair. Beachcomber is a word of American coinage. Primarily, it is applied to a long wave rolling in from the ocean, and from this it has come to be applied to those whose occupation it is to pick up, as pirates or wreckers, whatever these long waves wash in to them. Nothing comes amiss to the so-called beachcomber; he is outside of civilisation—is indeed a waif and stray not only on the ocean of life, but on the broad South Pacific, and he is certainly not above picking up those chance crumbs of the world around him which may be washed within the circle of his operations.

In the majority of cases, the beachcomber has been a seafaring man, who has become weary of a life of hard work, with but scant remuneration, on board of whalers or trading craft; and having landed from his vessel on one of the Pacific islands, and becoming domesticated among the natives, he engages their services in some of the many Polynesian industries which are so little known to the world, but which I have no space to describe here. The beachcomber is in the main a wild rough fellow, but hospitable and generous, as men must be who have to do with the Savaiori—or brown-coloured—race of Polynesians; for these people abhor a mean man, and will not tolerate his society. Their motto is: 'Disburse, divide; let your good fortune boil over in the direction of your friends; we are brothers—why should we not share with one another?'

Consequently, these men are usually poor, yet of great power among the savage tribes with whom they choose to spend their days. They dictate terms to traders in dealing with the natives for whatever they produce; they are great advisers of the chiefs; they act as interpreters, and receive a commission for their trouble in the shape of 'chain-lightning square gin'—a ghastly compound usually manufactured at Hamburg—the sale of which Sir Arthur Gordon did his utmost to put a stop to while Lord High Commissioner of Western Polynesia. It must not be supposed

that because the homes of the beachcomber are in the tropics, that they are anything like the emaciated relics of Anglo-Indian humanity that one sees occasionally in Bath-chairs at Bath or Bournemouth. The glorious south-east trade-winds of the Pacific Ocean so moderate the sun's rays as to make one doubt the reading of the thermometer. The beachcomber is therefore stalwart, smart, and lively; and some of them can lift a kedge-anchor and carry two hundred cocoanuts or more upon their shoulders. As a rule, they can climb trees like apes, and dive for fish to feed their families. They rarely, or never, wear shoes, but go barefooted at all times on beaches of sharp gravel and reefs of prickliest coral. Beachcombers generally marry native women and as a rule have large families. Their sons are often like bronze statues; and their daughters are models of beauty and strength. While it is true that their intellect is of a low order, and that they know little or nothing of ordinary morality, as we understand it, it yet must be borne in mind that the race of half-castes thus produced is likely to form a prominent factor in the future civilisation of Polynesia.

In certain spots to the north of the equator, there is now springing up a race which will unquestionably exercise in time a very powerful influence on the destinies of the Pacific. This race is especially remarkable for superior intelligence; for energy, patience and skill in navigation, and for a faculty of acquiring all the mechanical arts. These people are the progeny of European and American sailors by Japanese mothers, and in them are to be found combined the leading elements of human success—that is to say, all the courage and adventurous spirit which distinguished their wild and roving fathers, mingled at the same time with the acuteness, ingenuity, and concentration of purpose which are so eminently Mongolian and more particularly Japanese.

The earliest Anglo-Saxons who approached to the modern beachcombers were escaped convicts from the penal settlements of New South Wales. Thus the brig *Elisa* was wrecked off the Fiji group about the year 1808, and the ex-convict passengers managing to reach the mainland, soon came to amicable terms with the cannibals they found there. The *Elisa's* people had with them gunpowder, musket-balls, and muskets, and a plentiful supply of each article; and having advanced the Fijians a considerable stage in the 'noble art of war,' they were soon regarded as superior beings, and invariably led the tribes among whom they resided in the ceaseless internecine wars of Fiji in the days of man-eating. One Charley Savage particularly distinguished himself in these affrays; but, as might be expected, he came at length to a violent and not undeserved death. In fact, the record of the English pioneers of the Pacific, and especially in Fiji, is not calculated to make one fond

of one's race; for it is to the hideous crimes of this abundant convict class, and the very fair imitation of these crimes by successive generations of natives, that we owe the deaths—murders, if you will—of such men as Bishop Patteson and Commodore Goodenough. The white man sowed the seed of bad faith, licentiousness, and murder; and white men have reaped the awful harvest.

The British ship *Antelope* was wrecked in the year 1793 on the Palao, or Pelew Islands, and the islanders treated our shipwrecked fellow-countrymen with every possible kindness and hospitality for a period of over four months; but so effectual was the white man's example during even this short time, that these islanders are now regarded as simply so many piratical miscreants of the most infamous type. And not without reason; for they have been known to attack European vessels that have become entangled among their shoals and mercilessly massacre their crews. In some cases this wickedness of certain of the beachcombers has arisen from ill-treatment which they have experienced at the hands of strangers; but in most cases it is the result of the evil example of the worst variety of the modern Pacific adventurers—the strolling scoundrels of the great South Sea, who make themselves at home among the simple-minded barbarians and instruct them in every kind of vice and depravity.

The average beachcomber as he exists at this hour cannot in common justice be classed with the men who have in their 'black-birding'—or man-stealing—cruises considered cold-blooded murder one of the branches of their business; nor even with the presumably more respectable 'trader' who so often disgraces the colour of his skin. The better class of beachcombers are a unique set of men—

Who have burst all bonds of habit,
And have wandered far away,
On from island unto island,
At the gateways of the day.

At anyrate, that is the romantic side of their character, but one upon which, from my Pacific experience, I am not disposed to dwell too long. This is a practical age, and however theoretically interesting the beachcomber and the pirate may be regarded at a distance, if he interferes with the progress of civilisation and commerce, the sooner we see his services legitimately utilised, or his vocation gone, the better for the world at large.

Just north of the equator we find the Gilbert or Kingsmill group, inhabited by the Tarapon race of Polynesians. These poor barbarous Kingsmill islanders lived in a condition of comparative respectability previous to their knowledge of Europeans. Though savage, they were at least sober, and they had a sort of code of laws; but since runaway sailors from whale-ships have taught them that fearful art of making toddy from the cocoa-nut tree, they are incessantly drunk and perpetually fighting. These people are naturally of a good disposition, affectionate to one another,

grateful to those who are kind to them, tractable, ingenious, and industrious; yet owing to the bad example of Europeans, it would be difficult to find in any part of the world a more perfect Pandemonium than the Kingsmills presented not more than three years ago, and I fear no miracle in morals has since transpired.

A poor friend of mine, whose bones now rest not far from where the dome of the Mission Dolores marks the era of Spanish dominion in fair California, asked an aged beachcomber on one of the Kingsmills how he could live among so degraded a race. 'Ah, sir,' was the reply, 'you do not know these natives. When we came among them, they were different altogether from what they are now; and ever now there is a great deal of good in them, more than strangers can understand.' What share in the demoralisation of the Kingmill islanders the aged beachcomber admitted to, I do not know; but in common fairness it must be said that the permanent white residents never approach in bad example the infamous adventurers who literally roam all over the wide Pacific, seeking not only what they can devour, but what people they can demoralise. Some of the beachcombers get so thoroughly acclimatised and so deeply indoctrinated with the ideas of the savage races among whom they dwell, as to be sometimes apparently in doubt as to whether they had ever lived in the civilised world. Once in the Kingmill group I heard of a trader asking one of these white beachcombers as to the best way of cooking crayfish. 'We,' said he, 'are in the habit of cooking them in an oven of hot stones; but white men mostly like them boiled in a pot.'

Of stories about beachcombers there is positively no end. Perhaps one of the best is that of Paunchy Billy of Samoa, who was born in the same village as John Paul Jones, and who was in the habit of declaring: 'Sir, I wouldn't go back to Britain now, if you were to give me a thousand a year; and yet I will say that when I came here first, more than thirty years ago, I had a fashion of sitting on the stones by the sea-side of a night, and crying to myself for the home and friends I should never see again. But I know better now, and I have done with this many a year.' Billy used to relate how when Commodore Wilkes' exploring expedition visited Samoa, he went on board the United States ship *Porpoise* dressed in savage mats, and begged the Captain to take him away.

'I don't want any men; but what countryman are you?'

'A Scotchman,' said the beachcomber.

'Well, then,' said the American, 'I guess I pity you more than a little. I cannot take you away; but here's a sheath-knife and a plug of James River Cavendish, of which I make you a present. Had you been an American, I would have had you tied up to the gangway, and have given you a dozen with the cat-o'-nine tails.'

Billy asked the Captain to explain.

'Because,' retorted the Commander, 'had you been a citizen of the United States, I should have counted you a disgrace to humanity, for letting yourself run wild among a lot of scalping savages. But seeing you are a Britisher, and there is not room enough for you all in your overcrowded country, I pity you from the bottom of my heart—I dew!'

When any systematic effort is made in the interests of humanity and commerce to turn the vast resources of Polynesia to profitable account, the beachcombers and their descendants will be invaluable in their way as guides and interpreters, and in their knowledge of islands which in themselves are surpassingly rich, but of which the world in general knows nothing. At present the beachcombers may not be exactly an unmixed evil, but they certainly cumber the ground, and must sooner or later give way before well-organised efforts of capital judiciously directed, and thus leave a free-way for European civilisation.

THE FORTUNES OF BERTRAM OAKLEY.

BY JOHN B. HARWOOD.

CHAPTER VIII.—GROBY, SLEATHER, AND STUDGE.

MESSRS Groby, Sleather, and Studge had imposing offices in Westminster—Strafford Place, S.W.—not too remote from that sad window in Whitehall Palace whence Charles I., with the strange passive courage which seems the heirloom of kings, stepped forth to die. And let us hasten to say, that wherever contracts were made, or concessions granted, or some flaming prospectus sent abroad, from Paris or Peking to Peru, the names of those very eminent civil engineers were likely to be respectfully mentioned. They were widely known, largely advertised, had innumerable irons, at various degrees of temperature, in the commercial fire, and were reported to be enormously rich, and on the high-road to the condition of colossal plutocrats. The head of the firm, Sir Joshua Groby, M.P., was seldom seen. Those who are lucky enough, or self-sacrificing enough, to be Members of Parliament, were of course familiar with the sight of his bald head and grizzled whiskers at Bellamy's, or knew his queer old bell-crowned hat as he slumbered peacefully on the back benches while hot debate went on, and before he was roused up to walk into the lobby and register his vote. Those who were so fortunate as to dine with him at his palatial mansion in Belgravia, or to be present at Lady Groby's charming garden-parties at the Twickenham villa, of course saw something of the pompous old man, snubbed by his daughters, lectured by his wife, timorously fond of snuff, proud of his money, and leaving the affairs of the firm to his junior partners, Sleather and Studge.

The offices of Groby, Sleather, and Studge have repeatedly been mistaken for those of some department of Government. Deputations, or bewildered wretches with appointments to talk over a grievance with some Deputy Chief Clerk of the Property Tax, have blundered into that big hall, and refused to go out, so sure were they that the State alone could have paid for all those flaring terra-cotta tiles without and encaustic pavements within—that Munich glass in the windows—that labyrinth of rooms, and profusion of call-pipes. Yet was it a private place of business, as private as a place can be where half-a-dozen languages are being jabbered redundantly in the vestibule, and crowds are intriguing, imploring, persisting in craving for an interview—boon hard to get—with one of the partners. Amidst this crowd, on a certain day of that uncertain season—the raw, early

spring, when Nature seems not as yet to have determined whether to push on the coy vegetation of the hardy plants that herald the jocund year, or to go back to the cold death of winter—were Bertram Oakley and his patron. There they were, jostled by Jews, corpulent, oleaginous, with bulky pocket-books bursting out of the breast-pockets of their tight coats; elbowed by wiry Greeks, who at first sight might have been taken for Hebrews of a leaner growth; and mixed up with eager German and cynical French capitalists; men of Manchester; wiry, lank-haired Americans; and thick-set, bullet-headed men who looked as if they knew what the inside of a deep cutting or half-made tunnel might resemble.

There were not wanting functionaries of some sort, porters, clerks, and the like, of higher or lower degree, to keep some sort of order among the motley mass of applicants for admission, and to winnow the handful of good grain from the never-ending chaff. Some importunate persons got curt, and even rude answers. Others were patiently hearkened to, and recommended to put their statements into written form. There were those who were advised or permitted to wait; and some—much envied by the fretting outer herd—who got immediate attention, and whose claims for prompt audience were shouted out through the brass mouth-pieces of india-rubber tubes, and hoarsely acknowledged through the medium of the same serpentine apparatus. Among these last was Doctor Denham.

'Mr Sleather will be disengaged directly,' a clerk had said; and after twenty minutes' waiting, a bebuttoned page came bustling up, like an impatient little tug-steamer about to take a becalmed Australian clipper-ship in tow.

'Mr Sleather is at liberty, sir—this way!' cried the panting page, hurrying off Bertram and his benefactor at a great pace, as though there were a risk that Mr Sleather's liberty should come to an end before they should reach him, and the great high-pressure engine be at hot work again.

On they went, up the wide stairs, crimson carpeted, along a corridor draped with monstrous maps, and into a small room, softly carpeted, luxuriously furnished, but the walls of which were hung with maps and charts; and shelves and brackets heavy with geological specimens, and sections of submarine cables, and odd little models that looked like toys for children, but were miniatures of bridge and viaduct and dock and cathedral, adapted to every taste.

'Be seated, Dr Denham,' said Mr Sleather, standing up for a moment, with the painful effort of an imperfectly trained bear that tries to prop himself upon his hind-legs, and then sinking back into his deep arm-chair. 'I have got you here—let me see;' and the civil engineer rustled in his hand and glanced at a letter which he had selected from a pile of docketed letters. 'Yes; here is your proposal. You come on behalf of—not your son, hey?'

'No; a young friend in whose prospects I take an interest,' answered the doctor, with a kindly smile directed towards Bertram. 'Here he is, and his name is Bertram Oakley.'

'And you couldn't do better for his prospects, sir, than you are doing; troth, ye couldn't,' said Mr Sleather, whose rich Milesian accent would assert itself, as with a heavily-ringed hand he

stroked his brick-red whiskers. 'The premium, doctor, has been named to ye?'

'It has,' returned the doctor. 'It is a high one; but'—

'But think of the advantages,' interrupted Mr Sleather. 'We have a finger'—he shook one of his as he spoke; and neither Bertram nor the doctor could help observing that it was, strictly speaking, coarse, long-nailed, and of dubious cleanliness—'in every pie from Tipperary to Tibet. Our youngsters see the world, they do. It's as good, or better than to be born with a silver spoon in one's mouth, to be articted to Groby, Sleather, and Studge.'

'I can fully believe it, and will not cavil at the cost,' answered the doctor cheerily. 'In two months, your letter mentioned, I think, Mr Sleather, a vacancy may probably occur?'

'Let me see,' said the Hibernian partner, consulting a memorandum-book that lay at his elbow. 'Vaughan, Graham, Stoddart, Wilkins. Yes; Wilkins leaves us twenty-ninth proximo. Your young friend, if ye like, sir, may sign articles and fill his place. The cheque, I conclude, will be'—

'The cheque shall be ready, and the lad,' said the doctor, in his genial way. 'And allow me to tell you, Mr Sleather, that you will find the latter, when you come to know him, the better of the two.' And as he spoke, he laid his hand on the shoulder of Bertram, whose handsome face flushed crimson at the implied praise.

'Then we'll be grateful to ye for both benefits,' rejoined Mr Sleather, in his rich Limerick brogue; and at that moment there was a peremptory, if respectful, tap-tapping of eager knuckles at the door, and an anxious-eyed clerk came in with a pile of papers awaiting signature. It was clearly time for Bertram and his benefactor to go.

'Twenty-ninth prox. we'll expect ye,' said Mr Sleather as he gave three fingers to the doctor, and a nod to Bertram; and then called the next case, leaving his late visitors to thread their way through the labyrinth of passages, and to struggle with the upward flowing tide of fellow-creatures that encumbered the stairs.

'Signs of plenty of business, anyhow,' said the doctor blithely, as they gained the hall; and then no other word was spoken till both were seated in the doctor's brougham and speeding homewards. Even at Blackston, Dr Denham had paid outlying visits in such a vehicle; but this was a smart new carriage, drawn by a fine young horse, a dark chestnut, of immense power, and not too dear to buy. 'He'll do your work, doctor, and do it well, this many a year to come,' the honest horse-dealer had said, after the veterinary surgeon had given his favourable report and the bargain was struck. 'Fact is'—this was confidentially said—'he wants work. And if I could but have found a match for him, it would have been another fifty on to his price.'

On the way homeward then, Bertram caught hold of the doctor's hand and clasped it between both of his. 'Where shall I find words to thank you, sir!' he said with a gulp. 'Do not believe, if I am silent and awkward, that I forget what I owe you.'

'If you owe me anything, pay it to my girls, when I am not here to look after them,' returned the doctor, in that semi-serious tone in which he

so often spoke. 'But, Bertram, lad, what say you to your new place of business, eh, and your new employer?'

'The place is a stirring one, full of life and occupation to a degree beyond my hopes, and my deserts too, I fear,' said Bertram, with a sort of modest enthusiasm that became him well. 'But, as to Mr Sleather'—

'Well, my boy,' said his patron good-naturedly, as he noticed Bertram's hesitation, 'I daresay he impressed you very much in the same manner that he did me. And I daresay that an oily humbug is necessary in some of these great firms. Mr Studge, I have heard, is the working-partner, and with him, I suspect, you will have most to do. You can be happy, I hope, Bertram, with these people?'

'Happy and, I hope, useful too—thanks to you, dear sir,' said Bertram; and for an English strippling, there was a good deal of grace, all unconscious, as well as a very genuine sincerity, in the saying of it. We Britons can scarcely bear to thank or be thanked. The more effusive races on the other side of the Channel beat us hollow in both; yet, if their gratitude be more genuine or their bounty more spontaneous, contemporary history must be sadly at fault.

'There, there!' said the doctor. 'We must see about a lodging for you near your work.—And Bertram, would you mind pulling the check-string, and cautioning Thomas not to rattle on at so tremendous a pace? Going round the corner, he shaved the lamp-post, and just now, nearly upset an old Irishman's apple-stall. Peaceable doctors must not disport themselves in London streets after the manner of young Lord Tomnoddy in the *Ingoldsby Legends*.'

'Couldn't hold the young horse,' growled Thomas, over his beer, that evening—'couldn't, if my neck depended on it. And the governor wouldn't have bought him if he'd not been green in London ways.'

A WORD OR TWO ABOUT BIBLIOMANIA.

Of all the forms which the passion for collecting assumes, surely that of Bibliomania or book-hunting is the most innocent, most elevating in its tendencies, and—though the true Bibliomaniac would spurn the thought—in the end one of the best investments to which money may be put. Compared with the many ways in which gold is spent, it is even economical; and this is only one of many points which the book-collector can urge in its favour. If a piece of china, lace, or carved oak be valuable for its antiquity, much more so is a book which contains the compressed essence of the thought and opinion of the age in which it was produced.

Good society is, according to their different lights, the aim of every rank; and in one little room a man may surround himself with the noblest minds of those who have taken kingly rank in the empire of intellect. For him Shakespeare wrote, Milton sung, and Bacon and Newton toiled. The results of their labours lie close to his hand, and he has but to resign himself to their influence, and earthly trouble and care will be soothed by their siren voices.

Many of our largest public libraries owe their birth to private individuals, not a few of whom, like

Richard Heber, began with a single volume. He worked and, it must be confessed, spent so indefatigably that, as we are told, 'the new library at Hodnet, which he built only a few years before his death, was found to be full of books. His residence in London, when he died, was filled, like Magliabechi's at Florence, with books from top to bottom—every chair, every table containing piles of erudition. He had another house in York Street laden from ground-floor to attic with curious books. He had a library in High Street, Oxford; an immense one in Paris; another at Antwerp, Brussels, Ghent, and at other places in the Low Countries and in Germany.' Mr Heber was most liberal in lending his books to poor scholars; but was so enthusiastic a collector that he had frequently ten or twelve copies of the same work. Some idea of the extent of his libraries may be given by the fact, that at the sale after his death, the catalogues formed five thick octavo volumes.

The nucleus of the British Museum, fifty thousand volumes, was collected and presented to the nation by Sir Hans Sloane. As the wisest chimaenians confine themselves to one style, whether it be Wedgwood dragon or old blue, and thereby increase the value of their collections, so too the Bibliomaniacs may be divided into several distinct classes. According to Dibdin, 'there are the black-letter men, tall copyists, uncut men, rough-edge men, early English dramatists, Elzevirian broadsiders, pasquinaders, old brown-calf men, rubricists, Grangerites, and those who go in for vellum, old ballads, and play-bills.' There is also a lower class, called inch-rulers, innocent of knowing the contents of a volume, but to whom the breadth of the margin and the external expanse of binding are most significant, and who by these means could instantly detect a renewed book.

The art of renewing books is a most delicate one, and employs all the skill of experienced workmen. When used in a legitimate way, to preserve and enrich some valuable treasure-trove discovered in a tattered condition, a skilled workman applies with tender care a bituminous solvent to its ragged edges, and literally incorporates—by a paper-making process—each mouldering page into a broad leaf of fine strong paper. This is termed 'enlarging,' and is a lofty department in the art of binding. Then the once ragged fragment goes through the process of binding in Russia or calf, gilding, tooling, marbling, and takes its place as the pride of the book-shelf. When part of the Cottonian Library was burned in 1731, some valuable manuscripts were by the influence of the fire drawn into almost a solid ball. Some of those rescued were given over to the enlarger, and may be considered the brightest triumphs of the art. They may now be seen at the British Museum.

But there are other processes of renewing which are scarcely so honourable, namely, the manufacture of rare or early editions of old authors. This is done by staining the paper, imitating closely the decorated capitals, and reprinting accurately all defects. The production of First Folio Shakespeares has been a profitable piece of business. Paris is the centre of the renewing trade, though it is also practised to a small extent in England. Apropos of renewing, many collectors scorn its

aid, and will only purchase imperfect copies. At a large book-sale where many mutilated volumes had sold very well, one lot found very languid bidders; on which the auctioneer exclaimed: 'Only thirty pounds offered for this valuable book, gentlemen, a most curious book, and quite imperfect.' At another auction at the beginning of the century, an original edition of Boccaccio, printed in Venice, and of which there were only known to be two copies in existence, was sold for two thousand two hundred and sixty pounds; and a Didot Horace brought one hundred and forty pounds.

Many books are undated, their age being decided by the quaint conceits of the old printers. Gesner's *Bibliotheca* had numerous frogs and tadpoles imprinted on its pages, the printer's name, meaning a frog, being Latinised into Christopherus Froshoverus. Varro's *Quæ Exstant*, printed at Dort, is adorned with woodcuts of portly bears and their clumsy cubs, to immortalise the printer, Joannis Bearwont. So too a book issuing from the press of Gryphius of Lyons, begins and ends with effigies of portentous-looking griffins. The device of Michael and Philip Lenoir is a jet-black shield, with an Ethiopian for crest, and Negroes for supporters. Apicarius has a bear robbing a bees' nest in a hollow tree. But most valuable of all, Asceneius has an accurate representation of the printing press used at that period, every nail and screw being faithfully delineated, and a burly compositor setting up the type.

Sometimes books owe their fame and value to particular mistakes. A celebrated Elzevir *Cæsar* of 1635 is known by page 149 being printed 153, none other being genuine editions. How defective most editions of the classics are, may be guessed by the great value assigned to Didot's *Virgil* and the *Horace* of Foulis, said to be the only editions extant free from error. They have both been admirably copied by Baskerville of Birmingham.

The odd blunders as well as verbal eccentricities appearing in different editions of the Bible are too numerous to mention. A well-known specimen is 'the Breeches Bible,' so called because the aprons of Adam and Eve are in it so designated. The *Vulgate* issued by Sixtus V. is of immense value in consequence of its numerous blunders. The story of the German wife who altered the type in the passage declaring her husband should be her lord (*Herr*), to make him her fool (*Narr*), wants confirmation.

The titles of books are sometimes amusingly misleading. *Purley's Diversions* have caused acute disappointment to the searchers for 'something light and amusing,' it being one of our toughest books on grammar, enlivened by Latin explanations. When *Urban Bees* was first published, it was purchased by many an enthusiastic apiarian. It is a biography of celebrated men who flourished under the pontificate of Urban II., whose family device was a bee. When Mr Ruskin conceived the noble idea of reconciling the differences of Protestants and Papists by his own unaided genius, he published a pamphlet *On the Construction of Sheepfolds*. It had a great run among the moorland farmers, but was more provocative of profanity than piety. Edgeworth's *Essay on Irish Bulls* proved, as an investment, a dead loss to breeders. *M'Ewen on the Types* (of Christianity) was at a book-sale warmly contested for by a burly Scottish farmer and a journeyman printer. It fell

to the farmer, who was greatly chagrined to find that he had bought a book of sermons instead of, as he expressed it, a 'book upon tups' (Scottie rams). The printer was thereupon offered the book at his last bid; but having become by this time cognisant of its contents, naturally declined to purchase.

The man who is ambitious to found a large library, will soon discover it is the work of years, and requires endless patience and acuteness, even if supported by an inexhaustible purse. Five thousand standard works may be quickly obtained; and even ten or fifteen thousand, if he be very miscellaneous in his tastes; but after that the increase is very slow, the more so if he incline to early editions of rare books. 'Woe betide,' says Dibdin, 'the young Bibliomaniac who sets his heart upon Breton's *Flourish upon Fancie*, and *Pleasant Joies of an Idle Head*, or upon *Workes of a Young Wyt*, trussed up with a *Fardell of Prettie Fancies*. Threescore guineas shall hardly fetch these black-letter rarities from the pigeon-holes of Mr Thorpe.' Still he encourages the young collector by intimating that *The Ravisht Soul* and *the Blessed Weaver* may be obtained for fifteen pounds. Those who long for such rarities as *The Temple of Glas*, Lodge's *Nettle for Nice Noses*, *The Book of Sagts of Armes*, by Christene of Pisa, or Caxton's *Pilgrimage of the Soule*, will have many a weary hunt, and probably be disappointed in the end.

Strange as it may appear, there is actually a class of collectors who make it their boast that they care only for the outside *minutiæ* of a book. The 'outsider,' as he may be called, is one who denies to ordinary readers of books the merit of having any proper knowledge of them. 'He know anything of books? Why, bless you, he knows nothing of them except perhaps the inside!' But this type of collector is very scarce, and is perhaps, in the prejudices attributed to him, more sinned against than sinning.

Book-collectors are occasionally generous in allowing less favoured brethren the use of their stores. A splendid example of this liberality was the kindly hearted man who, for the sake of his friends as well as himself, had his books stamped, 'Joannis Grollieri et amicorum.'

The most acute form of the mania is reached when duplicate and triplicate copies are purchased. Before this, every book was 'absolutely necessary;' now, the disease is plainly apparent both to the victim and his friends. The type of the old collector of ancient literature is painted with such an accurate and loving touch by Sir Walter Scott in the character of his antiquary Monkbarns, that we suspect a fellow-feeling has been the cause of such clear insight. Listen to the old man gloating over his treasures: 'See this bundle of ballads, not one of them later than 1700, and some a hundred years older. I wheedled an old woman out of these, who loved them better than her psalm-book. Tobacco, sir, and snuff, and the *Complete Syren*, were the equivalent! For that mutilated copy of the *Complaynt of Scotland*, I sat out the drinking of two dozen bottles of strong ale with the late learned proprietor, who in gratitude bequeathed it to me. These little Elzevirs are the memoranda and trophies of many a walk by night and morning through the Cowgate, the Canongate, the Bow, St Mary's Wynd—

wherever, in fine, there were to be found brokers and trokers, those miscellaneous dealers in things rare and curious.'

In 'Snuffy Davie,' whom Oldbuck revered for his successful bargaining in the objects of their mutual idolatry, we have the picture of the Bibliomaniac who not only has a 'scent like a hound' for black-letter, but even manages to make money out of his transactions. Among other things, he purchased the *Game of Chess* of 1474—the first book printed in England by Caxton—at a book-stall in Holland for twopence. Its successive rises in price are thus portrayed: "He sold it to Osborne for twenty pounds, and as many books as came to twenty pounds more. Osborne resold this inimitable windfall to Dr Askeu for sixty guineas. At Dr Askeu's sale, this inestimable treasure blazed forth in its full value, and was purchased by Royalty itself for one hundred and seventy pounds!—Could a copy now occur, Lord only knows," ejaculated Oldbuck, with a deep sigh and lifted-up hands—"Lord only knows what would be its ransom; and yet it was originally secured, by skill and research, for the easy equivalent of twopence sterling! Happy, thrice happy, Snuffy Davie!—and blessed were the times when thy industry could be so rewarded!"

JOHN HARLEY'S MARRIAGE.

IN TWO CHAPTERS.—CHAPTER I.

It was blowing a strong south-easter one November morning in 185-, as I landed at Long Wharf, San Francisco, from the storeship, lying out in the stream, of which I then had charge. I had not proceeded many steps towards Montgomery Street, the principal business thoroughfare of the city, when a heavy hand was laid on my shoulder, and I recognised the cheery voice of John Harley, the most intimate friend I had made since my arrival in California, some sixteen months before.

'The very man, Ingram, that I wanted to see! I only arrived from Stockton half an hour ago, and was just coming off to your old tub, to bring you on shore; for I want your advice and assistance, and that immediately. The barque *Albert Allen* is to be sold at auction to-day at one o'clock; and as I hear she is a fine vessel, I wish you to come and look at her; and if you think well of it, I will bid up to a reasonable figure, more particularly if you will take command of her, and take again to the high seas, instead of burying yourself in a storeship.'

'You buy a ship, Harley! Surely, with your mining claims and city-lots, you must have quite enough on your hands,' said I, in some surprise.

'I have nothing of the sort; for I have sold out everything but the Caboose and lot in Happy Valley, which, in consideration of the sum of one dollar to me in hand paid, I shall bargain, sell, and convey to Mrs Sullivan, who nursed me so well some months ago. Her husband, you know, was shot in a gambling-house; and she is left with three children; though, by the way, I think she is better without him, the reckless drunken fellow! Come. I want some breakfast; and then we will

go and look at the vessel, and I'll tell you all my plans.'

John Harley was an Englishman of independent means. His father being a wealthy man, who had no other child, had on his coming of age settled a liberal income upon him. Whilst making a tour in the United States, curiosity and a love of new scenes and adventures had drawn Harley to the Far West El Dorado, without any notion then of gain. Catching, however, the universal fever of enterprise raging around him, he had pecuniarily interested himself in several undertakings.

Personally, he was a strikingly handsome man, of about twenty-four years of age. Genial in manners, well informed, and generous to a fault, he made friends wherever he went. In dress he was a marked man, in that *then* land of blue woollen shirts and red sashes. He and I had visited the mines in the early part of the year; but even in that rough region he was always neatly and tastefully attired, as much so as if he had been in the streets of London; and this peculiarity had obtained for him the sobriquet of 'Dressy Harley.' In those days, a well-dressed man was generally taken to be a professional gambler; but his frank, open, and jovial manners prevented any such misapprehension with regard to him. I had left him some months before in the Southern mines, where he invested some hundreds of pounds in mining claims, and between which and San Francisco he pretty equally divided his time, and being tolerably shrewd, he had been mostly successful in his ventures. Since we had parted, I had made a trip to the Sandwich Islands, where my vessel—in which I had one-third interest—being unfortunately wrecked, I returned to San Francisco almost penniless, and was glad to take charge of a flour storeship belonging to my late co-owners of the lost vessel.

During my absence, Harley made the acquaintance of Herr Van Dusen, a Dutch merchant from Batavia (the chief town of the island of Java), who had come thence in a vessel of his own. He was accompanied by his niece, the daughter of his deceased brother and partner, a sea-voyage having been recommended for her by her medical advisers. Two months of their society had proved sufficient to settle the matter, so far as John Harley was concerned; and the young lady, on her departure for home, had taken John's daguerreotype and a piece of his hair inclosed in a gold locket, as a souvenir of her English lover. The uncle would hear of no engagement without her mother's consent; but Harley had promised as soon as he could wind up his Californian interests, to follow them to Batavia and endeavour to obtain that consent.

All of this he related to me at breakfast, and a great deal more which is not worth repeating, lovers' rhapsodies being really interesting only to themselves. I learned, however, from him that Miss Van Dusen's mother was an Englishwoman, whose husband having retired from the command of one of the famous Dutch East Indiaman line, had

become a merchant in Batavia, and had there died, leaving a widow and this one daughter.

At the time of which I write, English ships in California were sold very frequently at extremely low prices. Deserted by their crews, and not unfrequently by their captains also, the ships were sacrificed often for less than one-fourth of their value, when sold at sheriff's sale, to defray the indebtedness incurred since their arrival. Availing himself of these circumstances, Harley desired to make something out of his trip to Batavia, the more so as there was no other way of getting thither without tedious and trying delay. After our inspection, therefore, he purchased the ship at the auction for a sum equivalent to about one thousand pounds.

A more thorough examination of the *Albert Allen* than time had permitted, proved that he, with his usual good fortune, had made an excellent bargain. It was fortunate that a clear week of fine weather followed the south-easter of the day of her purchase. In that week we got her topsides and decks calked, bought two or three necessary sails and running-gear, and took in stores, ballast, and other requisites. Indeed, no time was lost, for Harley was most anxious to get off. Using every expedition, and shipping a scant crew of Lascars, which economy as to numbers was justified by the almost certainty of a fair wind the whole way, with first the north-east trade, and then the north-east monsoon, we left San Francisco early in December; two mates, three passengers, Harley and myself, being the only white men on board. Harley's intention was to go first to Singapore in ballast, and then either freight the ship, or even sell her if a good market could be found there for a vessel of her class.

Of our passage, as being without any noteworthy incident, it is enough to say that, with remarkably fine weather, it was pleasant till almost the last day; that it was rapid, from favourable winds and a fast vessel in excellent sailing trim, and that on the thirty-ninth day we anchored in Singapore Roads. We missed our Christmas Day by dropping one day on crossing the one hundred and eightieth meridian of longitude, so that we skipped from the twenty-fourth of December to the twenty-sixth. On the latter day, we ate our plumpudding and mince-pies, and drank the health of those dear ones in North and South Britain, who were doubtless fast asleep in their beds as we sat at table. Nor did we forget old friends on the last day of the year; but talked of auld lang syne till past midnight, and with our one solitary bell rang the new year in with an expenditure of a dozen blue-lights.

Within two days of our arrival at Singapore, a tolerably good charter was obtained for the *Albert Allen* to proceed to Java, and return, which would probably take about two months. Our charterer, a shrewd Portuguese trader there, put a supercargo on board to look after his interests; and as he was urgent for our departure, and as Harley was not less so, on the sixth day from our dropping our anchor, we again weighed and sailed for Batavia, where, after a somewhat prolonged passage, we safely arrived.

The anchor had hardly reached the bottom, ere Harley would have shoved off in a shore-boat for the landing, but that I had to check him till the usual port regulations had been complied with; a breach of which would have involved him in great

trouble and expense. A full hour and a half was he fuming and fretting before, all the forms having been gone through, he left us, waving his hat, and urging the boatmen to renewed exertions, in his haste to get to Mr Van Dusen's offices.

Everything seemed so far to favour Harley's hopes. Mr Van Dusen took him home with him some miles from the town; and the same evening he was made acquainted with Miss Susette Van Dusen's mother. This was on the Monday; and on the Thursday I was to sail for Surabaya in the *Albert Allen*, to get her cargo, and would touch at Batavia on my return voyage to Singapore. In view of my speedy departure, the next morning I received an invitation to dine with Mr Van Dusen on the following day, together with an apology for the consequent shortness of the invitation, which was of course sent out of compliment to Harley, who had mentioned me as a most intimate friend.

At Mr Van Dusen's I met his sister-in-law Mrs Van Dusen, and her daughter; and certainly a more charming girl it had seldom been my lot to see. Harley informed me that the letters and references as to his standing and character, which had been forwarded to him by his father, to Singapore, together with introductory letters to gentlemen in Batavia, had been perfectly satisfactory to both Miss Van Dusen's uncle and mother; that the consent of the latter had been given, and the marriage he hoped would take place in about a month.

On the 12th day of March, I returned from Surabaya to Batavia with a full cargo for Singapore; and as Harley was to be married the next morning, I would be able to attend as best-man to my friend, and sail the same evening for my destination.

Very beautiful looked Susette in her bridal dress; and supremely happy was Harley as they stood before the clergyman and were joined in the bonds of matrimony. A most tasteful dejeuner was laid out at Mrs Van Dusen's pretty country residence; and at two o'clock I took my leave, having some ship's business to transact before sailing. The newly married pair were to leave in the cool of the evening for another house of Mrs Van Dusen's, on a plantation fourteen miles distant, there to pass the first few days of the honeymoon.

It was nearly sunset before I had concluded all the ship's business and returned on board. Everything was in readiness for sailing, so that as soon as I got on board, I gave orders to get under-weigh. Just as the windlass was manned, a note from Harley was brought off in a shore-boat. I opened it, and was completely astounded at its contents:

'Don't trip your anchor till I come. I am going with you. Take my traps on board.'

J. S. HARLEY.'

The scrawl was hardly legible, but it was still unquestionably Harley's handwriting. For an instant the wild idea flashed across me that it was possibly a practical joke. But then I knew that he was not the man to play any such; and even if he were, a few hours after marriage would hardly be the time even the most practical joker would choose to indulge in such a propensity.

I looked into the boat; and there were trunks, bags, and desks in the greatest disorder, evidently

hurried off without packing or care. The man in charge only knew that they came down in a wagon and were sent off in his boat, and that I was to grant a receipt for them.

For some little time I racked my brain in a vain attempt to guess at some clue to this extraordinary circumstance. I then took the spyglass, and looking towards the shore, saw Harley coming off to the ship in another boat. In a few minutes more he sprang over the side, looking like a man bereft of his senses. Throwing a number of small silver coins into the boat, he just looked at me wildly for an instant, saying: 'Get under-weight as soon as you can, Ingram;' and hurried down the companion stairway.

I followed, to tell him to go into my cabin, as the one he had occupied was filled with cargo; but he had already gone into mine and bolted the door; and in answer to my knock only replied: 'Come down after you have got a good offing.'

As soon as I had got the ship well outside, which was quite two hours, during which time I could not leave the deck, I went down again; and after knocking two or three times, Harley unbolted the door. He was pacing up and down just three steps each way. His face was deadly pale, with an occasional flushing over for a minute or so, as he clenched his hands and seemed almost in a convulsion. I did not speak. I knew not what to say. I took his hand for an instant, and pressed it. He drew his away hastily, and continued his walk to and fro. Then he spoke. 'They tell us there is a God. How could He in mercy allow this?' He struck his forehead, and sank on to the little sofa.

Again I took his hand. 'Calm yourself, Harley. Whatever may have happened, bear it like a man—like the man I know you to be.'

'Ingram,' he said, 'I came out of the house with you to see you off to-day, when you left Mrs Van Dusen; and if you remember, after you bid Susette good-bye, she went up-stairs. I have not seen her since. I shall never see her again—I never can see her again!'

He paused; and it flashed across me that he had made some discovery as to his wife's conduct or character which had at once made him determine to leave her. Possibly the expression of my tell-tale countenance indicated something of this, for he looked up at me suddenly.

'Poor, poor Susette! how can she bear this! She will think me a scoundrel; and oh! that is hard to bear. But better even that, than that she should know what I know; that which her mother dare not, cannot tell her.—Ingram!' said he, starting up; 'I have married my sister—my own mother's child!'

'Good heavens! Harley; do not say that. It cannot be. Some misconception of something you have heard.'

'There is no misconception. I made the discovery ten minutes after you quitted Mrs Van Dusen's. I am her son; though she knew it not, till I showed her a miniature of my father when he was young.'

'Thank God for his mercy, Harley, that you were not later in making the discovery.'

He paused for some seconds, and then replied: 'That is true. It was wicked to doubt His mercy.'

He seemed calmer now; and gradually I gathered

from him all the attendant circumstances. Intimate as I had been with Harley, I merely knew from him that he did not remember his mother, as she had died when he was an infant; and that he had been brought up by another lady till he went to school. On his family matters, he had always been somewhat reticent. 'I had a letter from my father,' or, 'I must write to my father by this mail,' was generally all the reference he made to the subject of his home belongings; so that I was as totally unprepared for the information he gave me now of his antecedents, as I had been for that connected with the unhappy, miserable events of the day.

SPIDER-SHOWERS.

IN 1835—if my memory be not at fault—there was a remarkably fine annular eclipse of the sun visible in England, which I, then a very small boy, was, among others, watching with some fear and much wonder. When the obscuring moon had begun to pass from the sun's disc, and the partial darkness was disappearing, one of the older spectators remarked: 'Now, after this there should be a shower of feathers.' Why he had such an expectation, he did not say; but as 'showers of feathers' are as proverbial as showers of frogs and fish, and may, when really understood, have as much foundation in fact as the best authenticated of these other atmospheric wonders, I propose to describe a shower of feathers which it was once my luck to witness; only the shower was not really a shower of feathers—though the falling material closely resembled these light bodies—nor a shower of snow, but a shower of gossamer spiders. But first let me refer to a few notable spider-showers of the past; also to some of the questionable inferences that have been drawn in regard to these spiders.

All who have read White's *History of Selborne* will recollect his description of the gossamer-showers which he had observed, one of which continued for nearly a whole day, and where the gossamer was descending from a surprising height; for when one gentleman ascended a hill near at hand, some three hundred feet high, he found that the gossamers were descending from a region in the atmosphere that was still beyond the reach of his gaze. These gossamer-showers are great mysteries, and once seen cannot be forgotten; for the air on these occasions becomes literally crowded with tiny parachutes, composed of a few threads of almost invisible gossamer, each of the parachutes being occupied by a Lilliputian aeronaut, in the shape of a very small but active spider. Whence these aerial creatures come, or whither they go, remains so far to be discovered; but it seems clear that somehow they have learned the navigation of the trackless region overhead which we call our atmosphere. Dr Martin Lister named this aerial spider 'the bird,' from the facility with which it can traverse the air; and upon one occasion, when he observed a shower of them in York city, he ascended to the top of the Minster, and found that even there they were descending from some region above that elevated standpoint. Mr Darwin, another observer of spider-showers, describes one which he saw in 1832, when on board the *Beagle*, at the mouth of the La Plata River, when the vessel was some sixty miles from

land; and he possibly was the first to notice that each parachute of gossamer carried a spider aéronaut; for he noticed them not only arrive on board the ship, but he also saw them reproduce a new parachute, and on this frail bark launch forth again 'on the bosom of the palpitating air.'

It is a common notion, when a spider-web crosses one's face in a summer evening, that it is the web of the gossamer spider; but this wants correction. Some of these threads may be the gossamer spider's work, but most of them are the cables of other species. Almost all spiders leave a cable behind as they travel from point to point, or swing themselves from branch to branch. The common geometric spider (*Epeira diadema*) generally, I might almost say invariably, leaves a thread in its track; and it is more frequently the threads of this and kindred spiders which haunt trees, hedges, &c., and so frequently tickle our noses in shady lanes. The *epeira* too can shoot out lines with as much facility as the gossamer spider. One day, when holding an *epeira* suspended to my finger by its cable, it disappeared as if by magic. To discover its *modus operandi*, I tried another in bright sunlight, and observed that while it was hanging thus suspended, and perfectly motionless, it was shooting out threads in various directions. These threads floated on, spreading out into three or four radii, and covering about sixty degrees, but all in a common direction. At length one came in contact with a post, and adhered to it. As soon as the spider found that one of the cables had found an anchorage, it cut the one by which I held it captive, ran up this cable of hope, and regained its liberty.

The *epeira* spreads its beautiful spirals from twig to twig on the outside. Beneath these snares, those of the common house-spider (*Aranea domestica*) may be found, where possibly this species is taking its summer's outing; and deeper among the branches still, another small spider can be seen in greater numbers than either of these two kinds. I have not been able to identify its species, though it is probably the same as that which Leigh Hunt observed at play, for I have seen it playing with its young ones as a cat plays with her kittens. The peculiarity of this spider is its family of fifty or sixty young ones, which it carefully rears, provides for, and educates. Its house, not unlike that of the 'old lady who lived in a shoe,' may be called Gothic, and is roofed generally with a sloping waterproof leaf of holly or kindred evergreen. In this mansion are lodged several score of young ones; while from its front an irregular web extends for several inches around. This web is not a snare which fastens, but a maze which confuses the prey. When a fly falls in, and is rapidly buzzing its way through it, the spider, directed by the vibrations of the web, rushes upon the confused insect, and paralyses its wings and limbs by smearing them over with a glutinous secretion. As soon as the captive is securely manacled, the wily spider ventures to give it the *coup de grâce* with its poison-fangs. While all this is proceeding, the young family come running out of their domicile to watch the contest; and as soon as the fly is powerless to harm them with blow from wings or limbs, they cluster round its body so closely, seizing upon every point of vantage, that a large

blue-bottle becomes completely hidden as they swarm over it. When the family is thus dining, so still and quiet are they, that they give the observer, at first sight, the impression that he is looking upon an unripe raspberry which has dropped into the web, the small globular bodies, packed closely together, so exactly resemble the unripe seeds of this fruit.

Then there are wandering or wolf-spiders enough in our fields to account for the network of webs that a dewy morning reveals. The webs are there, dew or no dew; but when covered with dew or hoar-frost, they are revealed to every eye. The female wolf-spider (*Aranea viatica*) may be found about the end of June carrying a spherical bag as big as herself, which is full of young wolf-spider eggs. These are hatched about July; and when we consider that each individual spider begins to travel on its own behalf, and invariably leaves a thread in its track, it is not very remarkable that every dewy morning in autumn should reveal pastures covered with sparkling spider-silk; and it may be these wanderers, and not the gossamer spider, which give our fields this appearance. I have seen, when looking across a pasture towards the declining sun, a streak of sunlight reflected from these webs, which reminded me of a rainbow, and this prismatic streak moved on as I walked along. This convinced me that our meadows are covered in autumn with a silken sheen which is revealed in prismatic colours by the evening sun, and as frosted silver by the hoar-frost or morning dew.

Since, then, it is unsafe to conclude that the dew-revealed webs of the autumn mornings are those of the gossamer spider, let us turn to the latter, which so rarely appears amongst us, in showers at least, to ascertain what is clearly known of its ways, and if any idea of its native haunts is attainable. These gossamer spiders have been seen descending from a considerable altitude in the atmosphere, and shortly afterwards individual spiders have been observed one after another to reascend, as if they were returning to their native place; and may not their peculiar 'happy hunting-ground' be in the atmosphere?

So far back as Chaucer, we find 'gossamer' amongst the mysteries of natural phenomena; and in the old nursery rhyme—

'Old woman, old woman, old woman,' quoth I,
'O whither, O whither, O whither so high?'
'To sweep the cobwebs out of the sky,'

we may have a fair proof that gossamer-spider showers had been noted long ago, and a possible proof that these tiny waifs were then suspected to be inhabitants of the atmosphere.

The first and densest spider-shower ever observed by me occurred in September 1875, and the second—where I saw them reascending only—in September 1880. (Gilbert White of Selborne observed one of these showers in 1741.) On the morning of the shower in 1875, there had been some electrical disturbance. There had been one loud peal of thunder, but no rain. About ten A.M. I noticed small spiders running over my coat-sleeves, and had to brush off several trails of gossamer-web. Looking round, I found that brick-walls, houses, branches of trees, &c. had these webs dangling from them, and that other gossamer-webs were continually falling from above, and adding to the

accumulation. By mid-day, a long fence was festooned from point to point of its triangular rail-tops with a ribbon-like ladder of gossamer; and this was growing broader and broader as the tiny creatures kept running along this ladder, each increasing the breadth by adding its own contribution of another silken thread.

On examining next an iron palisading near, I found it in a similar condition, with the tops of the iron spikes connected by a vibrating silken ladder of gossamer, in some places nearly an inch broad. All along this ladder the little strangers were running in an excited and hurried manner, as if they had lost their way, and had got into a strange country. Some, in travelling over their improvised road, made mistakes, and got into bordering webs of the Garden spider, where they were speedily devoured. About one p.m. the clouds cleared off, the sun shone out, and I noticed that some of the spiders had begun to reascend into the atmosphere. They might have commenced this reascension earlier; but on observing that some were reascending, all my attention was devoted to single spiders; and this is what I saw. Fixing my eyes upon one of them, I observed that as it left the gossamer pathway, it selected a clean spot on the iron railing, and gathering its limbs closely together, it projected from its spinnerets several threads which expanded outwards, and stretched upwards from nine to twelve inches. Then this parachute seemed to show a buoyant tendency, and suddenly the tiny creature left hold of the iron rail, or was lifted off it, and quickly 'vanished into thin air.' One after another I closely watched, with the same general result; though once or twice when the spider left the rail, it floated for a few seconds in an almost horizontal direction, prior to changing it for an approximately vertical one. They, however, disappeared from sight so quickly, that the angle of ascent could only be guessed at. This, however, may be set down, as the rule, at from ninety to one hundred and twenty degrees.

The second spider-shower I saw was not so interesting, as I did not observe the descent, but only the reascent of some odd ones. This, however, was effected in exactly the same manner as has been already described; and the few I saw were again ascending from an iron palisading, fully a mile away from that on which I observed them in 1875.

Now, after having watched these clever little aeronauts manufacture, in a few seconds, a fairy balloon capable of carrying them into the upper regions, and pondering over these singular facts, it occurred to me that possibly the real home of gossamer spiders may be in the blue ether, where, in the wonderful economy of nature, they may have their appointed work to do. Or, it may be that these Lilliputian roamers through space, like the migratory birds, have their appointed periods for going in one direction and returning in another. If so, they will naturally collect together for their migrations, and may occasionally have to rest on their journey, as swallows do on the rigging of ships at sea; hence, probably, these mysterious spider-showers. The migratory birds are evidently actuated by weather-influences; and may not these gossamer spiders be under somewhat similar laws, and be under the necessity, every autumn, of flying away

to more genial regions? Who knows? He only who made them and us, and Whose ordained ministers are, humanly speaking, infinite in their number and variety.

NEARLY STARVED IN THE MIDST OF ABUNDANCE.

'ANY letters for the name of Maitland?' I inquired of the clerk of the *Erie Hotel*, in Buffalo, New York state.

'Name of Maitland, sir? Well, yes; I think I recollect the name,' replied the clerk, as he looked over a large packet of letters which he took from one of the pigeon-holes in front of his desk. 'Ay; here it is. From Montreal, Canada East. Been here a week.' And he handed me the letter in question.

I tore off the envelope, and found it to be a letter from Stanwell, a friend with whom I had sailed from England, and who was now about to return thither. He wished me to come to Kingston to spend a few days with him and see him off. The letter having been delayed, only a week now remained of the time within which he was to sail.

Stanwell's letter took me completely by surprise, as I had not the least notion that he would so soon return to England; but I at once made up my mind to see him before he left America. Indeed I would have suffered any inconvenience rather than have disappointed him. But suddenly it occurred to me that there was a slight obstacle in my way. I had been absent on my tour longer than I had expected to be when I set out from Montreal, and my expenses had exceeded my original estimate. In fact, on my arrival at Buffalo I found it necessary to change my last ten-dollar bill. However, I rung the bell, and on the appearance of the waiter, requested him to bring my hotel-bill. The man stared at me, but made no reply, and in a few minutes the proprietor of the hotel entered the room with the account in his hand.

'Going to leave us so soon, sir?' he said.

'No,' I replied, glancing at the account which he had placed on the table before me, and which amounted to three dollars sixty cents. 'I am going away, but only for a few days. I have to meet a friend at Kingston, who is about to embark for England. I shall return in the course of eight or ten days, and shall remain for a fortnight. Meanwhile, I will leave the bulk of my luggage in your charge, and will take with me only a single portmanteau.—Your bill seems rather heavy for the short time I have been here?' I added.

'O dear, no, sir—quite contrary,' replied the hotel-keeper. 'I have charged you only two dollars for supper, bed, and breakfast; when the usual thing is to charge travellers the full three dollars a day, no matter how short a time they stay. Then there's one dollar sixty cents coach-hire, which I'm sure is reasonable enough.'

'I don't dispute your charges,' I replied, hoping that the landlord would say: 'Well, sir, as you are coming back, and are going to leave your luggage behind, it will be as well to wait till your return before making any payment.' But he said nothing of the kind.

'I will pay your bill,' I said, counting out the money; 'and if while I am absent, a letter should arrive from Montreal, directed to me, you will take good care of it. I have written to my banker for a remittance.'

'Very good, sir,' replied the landlord. 'Should such a letter arrive, I will take all possible care of it, you may depend upon that.' But this allusion to my banker at Montreal, so far from increasing his respect, led him, I fancied from the keen glance he gave me, to regard me with increased distrust.

Glancing at a newspaper after he was gone, I found that a boat—the *Jefferson*—left the wharf at twelve o'clock, so that I had only half an hour to spare. I counted over the money that remained to me. There was just four dollars fifteen cents; or sixteen shillings and sevenpence half-penny, from which my fare to Kingston—three dollars—had to be deducted; which would leave me but one dollar fifteen cents. In addition to the passage-money, there is a charge on board all American river-steamers for beds and meals and stewards' fees. But as the passage from Buffalo to Kingston was but two hundred miles in length—though the voyage was necessarily prolonged by the tedious passage through the Erie Canal, from Lake Erie into Lake Ontario—I thought I could very easily dispense with regular meals and bed for twenty-four hours, and be content with such food as I intended to supply myself with, on my way down to the wharf. Accordingly, on my way thither I expended seventy-five cents in the purchase of biscuits and cheese, and thus left myself with only thirty-seven cents, or about eighteenpence English, in my possession—with the exception of the three-dollar bill I required wherewith to pay my passage. The steam-boat bell was already ringing when I reached the wharf. There was not a moment to lose, and I hurried down to the purser's box on the quay.

'The *Jefferson* goes on to Kingston?' I said to that functionary, who was seated inside the box.

'To Kingston anyhow, and maybe farther down the river,' he replied. 'But if you're going on board, you'll best hurry up. She'll be off in half a minute.'

'The passage is three dollars?'

'Yes, Mister. Three dollars is the regular fare; but—'

'Here, then,' and I placed my three-dollar bill before him, and was starting off, when he cried: 'Stay! Wait a moment, Mister.'

'The bill is a good one,' said I.

'Yes, Mister; there isn't nothing to say ag'in

the bill, and three dollars is the regular fare. But if you're agoin' aboard the *Jefferson*—'

'I shall have to hurry, or be left behind,' I interrupted; for the moorings were cast loose, and the boat was already beginning to move from her berth alongside the wharf. I thought the purser was going to explain to me that meals, bed, and attendance were extras, and as I was well aware of that, I wouldn't wait to listen to him, and in a few moments I stood on the steamer's deck.

A beautiful boat was the *Jefferson*, apparently quite new, for everything on board of her was as clean and spruce as possible. There were not a great many passengers; but those who were on board moved about in groups, audibly expressing their admiration of the vessel.

Almost as soon as the boat started, feasting began. 'Any lady or gem'man wot wishes for lunch, 'll find it spread out in the fore-cabin,' said the Negro steward, ringing his bell as he passed along the decks. 'Dinner 'll be at four o'clock, tea at six, supper at nine,' he went on to say; 'and ladies and gem'men 'll please choose their own beds, 'ceptin' the state-rooms, wot is reserved, and 'll go to bed just when they please.'

Every passenger, I believe, with the exception of myself, descended to the cabin to partake of lunch, with a promptitude that gave me the impression that they had purposely refrained from gratifying their appetites until they should come on board; and my persecution at once began.

'Lunch in the fore-cabin, sar; best go down. Capital lunch, sar,' said the steward when he saw me standing alone on the saloon-deck.

'No; thank you, steward,' I replied, 'I never take luncheon on board the boats. It doesn't agree with me.'

'Glass o' champagne can't do you no harm, sar, anyhow,' said the steward; and I was quite of his opinion. Indeed, when I heard the corks popping, I thought I could enjoy a glass of champagne very much; but wine was not to be indulged in by a passenger with but eighteenpence in his pocket, and I remained obdurate to all the steward's persuasions.

The tedious passage through the Erie Canal was commenced soon after we left Buffalo; but it was enlivened by a capital band of music, and by impromptu dances got up, both on deck and in the saloon, by the passengers, who seemed bent upon enjoying themselves to the utmost. At dinner-time the bell again rang, and there was a general rush into the cabin, from which most appetising fumes arose and pervaded the deck. I felt it hard to be obliged to content myself with the biscuits and cheese with which I had provided myself, while all my fellow-travellers were feasting themselves with dainty viands; but there was no help for it, and I was fain to be content.

Again the steward invited and even urged me to go to the cabin, but I declined, giving the same excuse as before, namely, that I had no appetite when on the water, and preferred to remain upon deck. I thought I heard some muttered exclamations of surprise as to what, in the name of wonder, had brought me on board, escape from the steward's lips; but I took no heed of what he said.

At eleven o'clock the bell rang for bedtime. The saloon was to be closed for the night; but

those who did not care to retire to bed so early, could return to the saloon-deck. However, the passengers, I presume, had eaten and drunk so heartily that they all felt sleepy, for in a quarter of an hour I found myself alone upon the deck.

'You not go for choose a bed, sar?' said the steward in amazement. 'Dat ar nebber do. No eat, no drink, no sleep, by-'m-by you be sick.'

'I prefer to remain in the open air when I'm upon the water, steward,' I replied. 'I daresay I shall doze off where I sit, by-and-by.'

'Den you catch cold, sar,' said the darkey.

He left me upon the deck, but I fancy he went to the captain, and acquainted him with the fact that there was a passenger on board who had not eaten a meal since the boat left Buffalo, and who now declined to go to bed; for in a few minutes the captain made his appearance by my side, and expressed his great regret that I could not enjoy myself better.

'I do enjoy myself well enough,' I replied; 'but I can't sit at table nor sleep in a bed when I'm upon the water.'

'Then, my dear sir, let the steward bring you anything you fancy, upon deck,' said the captain; 'and if you can't sleep below, in the cabin, I'll tell him to bring up a mattress and some blankets. You can spread them on the deck and lie down. That will be better than sitting up all night.'

But I reflected that food and bed and blankets brought to me upon deck, would have to be paid for, and that the steward would probably expect a handsome gratuity for his extra trouble. I therefore declined the captain's kind offers; and told him that I had provided myself with a few biscuits, which I preferred to anything else when on board a steamboat, and that I could sleep very comfortably sitting up upon deck.

Perceiving that I would not be persuaded, the captain left me to myself; and I passed the night where I sat—not very comfortably—for a drizzling rain fell for an hour or two during the night; and towards morning, though it was midsummer, the wind blew chill across the water.

We had passed through the Erie Canal during the night; and about eight a.m. I found that the steamer was drawing up alongside the wharf of some small lake-port, that the steam was blowing off, and that several artisans were waiting evidently to come on board.

'Why—what is the meaning of this? Where are we now?' I inquired of a passenger who stood by my side.

'Waal, Mister,' was the reply, 'I reckon how it means that something hev g'in way about the paddle-wheels, and these men is coming on board to put things to rights ag'in. As to whar we air, I know no more than you do. In some creek on the lake, I reckon.'

'We are not yet near Kingston?' said I.

'Nigh Kingston!' exclaimed the Yankee. 'No; I guess we beant more than thirty miles at most from Buffler. These here new boats travels slow till they get into working order.'

'Is this a new boat?' I asked.

'Waal, yes. Seein' as this is her first trial-trip, Mister, I reckon she be. I thought everybody on board knew that,' was the reply.

'Heaven knows, then, when we shall get to Kingston, at this rate!' said I.

'It may take some time to make the v'yage,'

replied the passenger. 'But what matters so long as they g'in us good food and plenty on't, and moosic and everything comfortable?'

'It matters to me,' I said; 'because I am in haste to reach Kingston.'

'Then you orter hev waited for the next boat, Mister. She'll be in Kingston afore we shall, I reckon.'

'How on earth was I to know that?' I asked.

'Anyhow, it ain't no use grumblin',' said the passenger. 'I'm content, and so I b'lieve is most everybody else aboard the boat. I reckon there'll be time enough to take a look round ashore, afore we're off ag'in, seein' how the passengers is most on 'em going on shore.'

This was the fact, and as I could not help myself, and as I had already consumed nearly all the biscuits and cheese with which I had provided myself, I also strolled on shore, and expended the few cents that remained to me in purchasing a fresh supply.

It was near mid-day before the repairs were completed and the vessel was again under steam; and late in the afternoon we ran towards shore, and very soon I saw the houses of what appeared to be a considerable town.

'Surely this cannot be Kingston?' said I to the steward.

'Dis yere, Kingston, sar!' the Negro replied with a grin. 'No, sar; I guess dis not be Kingston. Dis Picton, Prince Edward's, sar; Kingston long way off yet. Nebber see Kingston dis night, sar.'

'Then, in the name of goodness, why are we going in here?'

'Cos, sar, dem dur fellers wot make de repairs in de morning, no do dem work proper, and de wheel am broke down ag'in, sar.'

This was too much. I could not reply for very vexation, and it increased my vexation to perceive that my fellow-passengers, so far from complaining of the delay, seemed to be delighted at the idea of visiting the flourishing little town of Picton. Moreover, my second supply of provision was nearly exhausted, for I had not money enough to make an extensive purchase, even of biscuits and cheese, and if the passage were to be much longer delayed, I foresaw that starvation would stare me in the face.

With me the captain appeared to sympathise sincerely. 'It must be very disagreeable to you, sir,' he said, 'to meet with these delays; but they are to be expected on a trial-trip, and I do really wonder that you, knowing that you are unable to enjoy yourself upon the water, should have ventured to take passage in this boat. However, I trust we shall be snug in Kingston harbour to-morrow night.'

To-morrow night! Twenty-four hours longer, and half that time without food! I did not know what reply to make, so I remained silent; but I made a secret, solemn vow that never again would I take passage on board a steamboat, were she the handsomest vessel that ever floated, until I had fully satisfied myself that she was not going on a trial-trip.

I took a stroll through the town—a pretty town enough, where everybody appeared to be cheerful and thriving; but an earthly paradise would possess few beauties in the eyes of a stranger who knows nobody in the place, and is without a farthing in his pocket; so I very soon came on

board again, lounged about the saloon until it was closed at midnight, and then took my station, well wrapped up in my cloak, beneath the awning on the saloon-deck. It seemed to me to be an age since I had partaken of a decent, or a full meal, or had drank anything stronger than water; while, despite my protestations that I never felt hungry when upon the water, the pure fresh air that blows across Lake Ontario, had—combined with the scant, unsavoury food upon which I had subsisted for two days—given me a tremendous appetite. If I had had the face to sit down to the dinner-table—and I *was* almost driven by sheer hunger to do so, in spite of all I had said—I fancy I should have astonished my fellow-travellers. More than once I was strongly inclined to confess everything to the captain, as I now felt that I ought to have done when I first came on board. But I could not bring myself to face the jeers and suspicions of my fellow-travellers, if I were to take my place amongst them. At six o'clock A.M., the *Jefferson* again got up steam, and once more we resumed our passage.

No one on board the steamer would have enjoyed the scenery of Lake Ontario more than I, had I beheld it under more pleasing circumstances; but I had furtively eaten the last morsel of my second scant supply of provision at daylight that morning.

'Do, my dear sir, just try,' urged the captain. 'It is probably a mere fancy on your part. Begin to eat, and you will find your appetite increase with every mouthful you swallow. I've seen many such cases before now. It really distresses me to see you—as it were—starving in the midst of abundance!'

I know that it distressed *me* to starve in the midst of abundance! Wouldn't my appetite have increased, if I had once begun to eat? I rather think it would! But I shook my head dolefully in reply, as I had done before. And still the music played merrily, and the passengers all vowed that they had never before in their lives had 'such a good time' as they had had since they left Buffalo.

At length, just after nightfall, the city of Kingston 'hove in sight,' as sailors say, its lamps glittering as we drew nearer, like a galaxy of bright stars rising in the horizon, and in another half-hour the *Jefferson* lay moored alongside the wharf, and the passengers—I among the rest—shook hands with the jovial and free-hearted captain, and stepped on shore. It was near ten o'clock P.M., and the house at which my friend was staying was a mile or thereabout beyond the city. It was too late to think of hunting him up that night, and besides I felt that I could not possibly remain any longer without food. I therefore determined to go to some respectable hotel, and ask for supper and a bed, knowing perfectly well that I could easily borrow money from my friend on the morrow, wherewith to pay my bill. As I walked through the streets, looking out for the *King's Arms*—a hotel at which I had stopped on the occasion of a former visit to Kingston—I was overtaken by one of my late fellow-passengers on board the steamer. 'I'm sure, sir,' said he, 'you must be rejoiced to set foot on shore again. I think I should have been starved to death had I been in your position on board the *Jefferson*.'

'I am well-nigh starved to death,' I replied;

'and I'm now looking for a hotel where I can get a good supper and a comfortable bed, before I seek out the friend whom I have come to meet, though I am now a day later than I expected to be when I left Buffalo.'

'I wonder,' said my companion, 'why, if you were in haste to reach Kingston, you took passage on board a vessel that was going to make her first trial-trip. Had you waited some few hours longer at Buffalo, you would have arrived here a day sooner!'

'How was I to know that the *Jefferson* was going to make a trial-trip?' I inquired, somewhat testily.

'How! You didn't know? Do tell! Now that is strange!' exclaimed my companion. 'Didn't they tell you? Didn't you see on the card?' he went on.

'They told me nothing about it,' I replied. 'And as to the card'—thinking he alluded to the placard notifying the time of sailing of the different steamers, pasted up on the wharf—'I hardly glanced at it.'

'Wa'll, now, do tell! That is moosical' [amusing], said my companion, as if he were speaking to himself. Presently he went on again: 'Anyhow, we'd a real good time aboard, and so you'd say, if you could have enjoyed yourself better.'

'I daresay it was pleasant enough,' I replied; 'though I marvel how the passengers put up so contentedly with the delays. There was music and dancing and good feeding—nothing to complain of in that way. But all these things cost money.'

'Exactly!' said my companion; 'but when folks do go in for enjoyment, what matters a little delay? It serves to prolong the enjoyment; and then again, what matters if things do cost money, when folks ain't called upon for to pay for 'em? It must have cost the owners a few dollars, though—this trial-trip! I wonder how many *invites* they sent out. There was a good lot of folks on board, anyhow. Did you count 'em? I tried to, once; but, somehow or other, my count got mixed up, and I didn't try to count 'em again.'

A light suddenly broke upon me! I saw everything clear enough now. The passengers—with the exception of myself—were all invited guests of the owners of the *Jefferson*. I understood now the cause of the purser's hesitation when I handed him my three-dollar bill, and the reason why he called upon me to stay a bit, when I was hurrying on board! I had paid away three dollars that I need not have paid, had moped and grumbled when I might have enjoyed myself to my heart's content, free of cost, and had half starved myself in the midst of abundance!

I was too much vexed with myself for my stupidity, and too much ashamed of the part I had played, to confess my mistake to my companion. But as I had now reached the hotel I was seeking, I bade him farewell, entered the hotel, and left him to go on his own way.

The next morning I met Stanwell on the quay, whither he had come on the arrival of every steamboat from Buffalo for several days past, hoping to meet me. To him and his friends I related the story of my foolish mistake, and laughed over it with them, though they laughed at me—as well they might—for my silly pride,

or shamefacedness, which had prevented me from making known my awkward position to the captain when I first set foot on board the steam-boat.

EASY HELPS TO THE SPREAD OF POPULAR SCIENCE.

MORE and more is being done every day in this country to popularise and simplify the teaching of science, to strip it of much of its forbidding technicalities and terminology, and to render it possible of acquisition by any person possessed of an ordinary elementary education. That this is so, should augur well for the future of our arts and industries; for the prosperity and progress of these must depend largely upon the science-teaching and science-knowledge of the next fifty years. The rule of thumb, which was long sufficient for the British artist and artisan, is every day becoming more antiquated and less trustworthy; and if these would be in a position to compete with their continental rivals, they must avail themselves of all the means which science places within their reach.

But there are branches of science which do not immediately concern our arts and industries—which may indeed be of no practical, that is pecuniary, advantage to any one; but which may by their acquisition add very much to the happiness of life, and to that intellectual pleasure which arises from the contemplation of the natural objects and organisms that we see around us. This pleasure is similar in kind to that which a lover of books derives from the use of his library, and a lover of art from the study of his gallery. Neither of these classes may seek, or desire to seek, other than purely mental enjoyment from their particular studies; and as, whatever it may be with art, the use of books is now open to the poorest and meanest among us, none who is able to read but may taste of the intellectual pleasure to be derived from reading. In like manner, the book of Nature is open to all, in a wider and more comprehensive sense than can be said of any other branch of study; but unfortunately, a great many persons are unable to read it. This inability may arise either from utter neglect and inattention, or it may—as in many cases it does—arise from the absence of suitable means of tuition. One may admire a wild-flower without being able to name it, or be interested in an insect without knowing its species and family; but if any one nowadays has a desire to be able not only to admire but to know, it is neither the fault of our scientific educationists nor of our publishers of books, if that desire be not satisfied. Books on science, popularly conceived and popularly expounded, and at a price which renders them easily accessible, form one of the striking features of our present-day literature.

We have three of those books before us now. The first is by the late Professor Ansted, of King's College, London, and is entitled *In Search of Minerals* (London: Society for Promoting Christian Knowledge). Written in a pleasant and intelligible way, it deals with minerals, including gems or precious stones, quartz gems, the softer gems, and other valuable stones; the minerals derived from the vegetable and animal kingdoms, such as jet, amber, pearl,

coral; the non-metallic minerals, and the ores or minerals that yield metals more or less valuable. Its expositions are clear and readily understood. For instance, on the subject of organic and inorganic substances, the writer says: 'Minerals belong to the inorganic world. They are formed frequently, and they increase rapidly; but they cannot be said to be born or to grow, in the sense in which we make use of these terms in reference to organic beings. The difference between organic growth and mineral aggregation is not always easily determined; but we may recognise it by considering that the simplest forms of organic existence increase by the addition of cells already living, whereas the mineral can only increase by the addition of inorganic atoms, whether simple or compound. This does not teach us what life is, nor even where life begins; but it shows why the animal or the plant and the mineral, though consisting of the same elementary substances in the same proportion, must develop differently from the very commencement.'

That which the book chiefly deals with—the study of minerals—is serviceable for many reasons. Some minerals are of value intrinsically, as natural objects used for ornamentation. Others, such as coal and ironstone, whose continued supply lies at the very root of our national prosperity, are of great value for industrial purposes. Some, again, are curious in themselves and their relations, and form subjects of study to those who can admire what is beautiful apart from any question of utility. To the many whose worldly interest it is to have a knowledge of minerals, how we may know them, and where they may be found, this little work of Professor Ansted's will be useful.

Rising from inorganic substances to the lower order of living or organic matters, we have another book from the same publishers on *Ponds and Ditches*, by M. C. Cooke, LL.D. This little volume appeals to a wider section of readers than the former. For one person who is interested in mineralogical appearances, there are a hundred who, as they take their walks abroad, wonder at the thousand little living things which they see in the air around them and on the earth at their feet. They have stood and watched curious small creatures inhabiting the stagnant pool by the wayside, and have naturally desired to be able to know something about them—their name, their nature, the process of their birth and growth, the changes or metamorphoses which they undergo, their different appearances in the larval and in the perfect state, and a hundred other questions that occur to intelligent observers of what they admire but do not understand. We are apt, in thinking of life as we see it in the animal world, to connect that life with the higher forms only. And yet, 'between the elephant, as representing the largest land animal known, on the one hand, and the most minute living creature yet discovered on the other, the middle position, as regards bulk, between the largest and the smallest would be that of an insect the size of the common house-fly.' In this way, one can understand, even without going down to living things smaller than can be seen by a pocket lens, what a great field of study there is in the region of the lower forms of animal life, as they are to be found in their habitats, the 'ponds and ditches.'

Many persons, in the course of a summer

morning's walk, must have observed in the puddles by the roadside, or in the standing-places of the ditches, that the water glistened as if some oily substance had been dropped into it, and had spread itself out on the surface—only the glitter is that of a hard metallic substance, rather than of oil, and is of a rich bronze or golden-brown colour. Now, that which you thus see on the top of the water is a collection of minute organisms termed diatoms. For a long time it was a disputed point whether diatoms should be placed in the vegetable or the animal kingdom; as, when they are observed through the microscope, their skeleton is found to consist of a pair of transparent plates, of the same substance as glass, and as indestructible as flint. It is now, however, finally settled that, notwithstanding this shell-like formation, they belong to the vegetable kingdom—that they are indeed microscopic aquatic plants. Then there is another class of objects to be found in ponds and ditches, of great interest—the rotifers, so called because they have a motion resembling that of a wheel. In length they are about the fifteenth part of an inch, and form beautiful objects in water under the microscope. They are marvelously tenacious of life. You may dry them to a powder, and keep them a year, or even two years in your cabinet, and when again put into the water, they will in the course of an hour or two revive, and be found whirling about with their accustomed vigour. Of these and numerous other creatures that inhabit our ponds and ditches, Dr Cooke's little volume tells much that is worth knowing.

We have still another volume on nature and natural science, namely *Nature's Byeways*, by J. E. Taylor, the editor of *Science Gossip* (London: David Bogue). This interesting manual covers a much larger field than either of the two volumes above noticed, and treats the various subjects under consideration in a way that is quite intelligible to ordinary readers, yet not unsuited at the same time for the initiated. The chapters, 'A Naturalist on the Tramp,' are especially entertaining, as they enable us to go along with the lecturer, and note his remarks on the geological, botanical, zoological, or other features of the country through which he passes. On the subject of the Colorado Beetle he has some important suggestions. He is of opinion that if we do not too far disturb the 'balance of life,' by killing the birds that kill the insects, we need not fear for an invasion of that dreaded beetle, as it is the disturbing of this balance of life that lays us open to external invasions. This is a most important principle, and one which, we fear, is too often forgotten by agriculturists and others anxious to exterminate every creature that is supposed to be what is called 'destructive.' Indeed, we consider it one of the most important subjects that can occupy the attention of all who have the welfare of their country at heart. So long as the proportion of creatures that live and feed on other species is kept in a fair condition, there is no room for invaders. Again, he thinks our damp, rainy climate would, in the case of the Colorado Beetle, serve us in good stead. At least, they could not breed here as they do in the United States, where four broods are common in the year.

There are many other subjects of practical importance discussed in Dr Taylor's little work;

all of which, while ministering to the advance of scientific knowledge, are of importance also as showing how that knowledge can be brought to bear with good results on many of the questions that are continually cropping up in the various departments of trade and agriculture.

LINES UPON A CAGED LARK.

A CRUEL deed

It is, sweet bird, to cage thee up

Prisoner for life, with just a cup

And box of seed,

And sod to move on barely one foot square,

Hung o'er dark street, midst foul and murky air.

From freedom brought,

And robbed of every chance of wing,

Thou couldst have had no heart to sing,

One would have thought.

But though thy song is sung, men little know

The yearning source from which those sweet notes flow.

Poor little bird!

As often as I think of thee,

And how thou longest to be free,

My heart is stirred,

And, were my strength but equal to my rage,

Methinks thy cager would be in his cage.

The selfish man!

To take thee from thy broader sphere,

Where thousands heard thy music clear,

On Nature's plan;

And where the listening landscape far and wide

Had joy, and thou thy liberty beside.

A singing slave

Made now; with no return but food;

No mate to love, nor little brood

To feel and save;

No cool and leafy haunts: the cruel wires

Chafe thy young life and check thy just desires.

Brave little bird!

Still striving, with thy sweetest song,

To melt the hearts that do thee wrong,

I give my word

To stand with those who for thy freedom fight,

Who claim for thee that freedom as thy right.

A. B.

CHANGE OF TITLE.

Owing to the title of A STRANGE RETRIBUTION having been used on a former occasion by another Journal, we have to inform our readers that our story so styled, and published in the January part of this magazine, will in future editions appear as

FAIRY.

It is almost needless to add that we were unaware of the existence of another story bearing a title similar to that which we adopted.—ED.

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